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UNILEVER PATENT GROUP  
800 SYLVAN AVENUE  
AG West S. Wing  
ENGLEWOOD CLIFFS, NJ 07632-3100

EXAMINER
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FOLEY, SHANON A

ART UNIT	PAPER NUMBER
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1619

NOTIFICATION DATE	DELIVERY MODE
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12/10/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentgroupus@unilever.com



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### DETAILED ACTION

As a note, instant claim 19 is designated as “cancelled”, but is clearly amended and intended to be of record for consideration, as evidenced by the “Remarks” section of the amendment.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4-6, 9, 10, 12, 16, 17 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barton et al. (WO 96/10387) and Moeller et al. (US 4,833,147) for reasons of record.

Applicant points to page 24 and argues that the xanthine component and the alpha hydroxy acid component have been found to synergistically improve high humidity style retention.

The data provided on page 24 and applicant’s arguments have been fully considered, but are found unpersuasive. Half of the styling compositions compared in the working example comprise either 5% caffeine or 5% citric acid (emphasis added). In contrast, the instant claims require both ingredients (emphasis added).

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The data regarding curl drop values on page 24 is summarized below:

	<u>Caffeine</u>	<u>Citric acid</u>	<u>Caffeine and Citric acid</u>
	45.8%	37.5%	35%
	48%	49%	
<u>Deviation value:</u>	2.2%	11.5%	

The combined effect of caffeine and citric acid does not equal a substantially reduced level, or even additive level of curl drop since the deviation between each ingredient of caffeine or citric acid separately, ranges between 2.2% to 11.5%, respectively. There is no evidence of additive effect, much less synergistic, when caffeine and citric acid are combined.

Applicant argues that there is nothing in Barton et al. or Moeller et al. that discloses or suggests the use of a substituted xanthine in combination with an alpha-hydroxy acid.

Applicant's arguments have been fully considered, but are found unpersuasive. If Barton et al. or Moeller et al., separately taught all of the limitations instantly required, either reference teaching all of the required limitations would have been applied under the anticipatory statute. However, since the teachings of Moeller et al. remedy the deficiencies of Barton et al. and provide motivation for modifying the teachings of Barton et al. with a reasonable expectation of success, the claims are properly rejected under prima facie obviousness.

Applicant further argues that neither Barton et al. nor Moeller et al. discuss "hair lengthening" or reduction in frizziness. Applicant further explains what is intended by this phrase and how it is measured.

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In response, while neither Barton et al. nor Moeller et al. specifically discuss lengthening properties of the treated hair, it is determined that the instantly required ingredients and the method steps are rendered *prima facie* obvious from the combined teachings of Barton et al. and Moeller et al. Therefore, the intended results accomplished by the combined teachings of Barton et al. and Moeller et al. would have been inherently produced.

Applicant argues that Example 3.2 of Moeller et al. fails to teach the required contents of xanthine and alpha-hydroxy acid ranging between 2 to 5wt%. Applicant states that the components in the example are outside the claimed ratio recited in claims 1, 17 and 19.

Applicant's arguments and a review of Moeller et al. have been fully considered, but are found unpersuasive. Barton et al. explicitly state that all of the ingredients listed in the formulation (including xanthine and citric acid) are present in quantities ranging from 0.1 to 5%, see page 3, lines 23-24 and 27. Therefore, the quantities of components instantly required are taught, or at least suggested, by Barton et al. Manipulation of relative amounts of formulation components results in differences in concentration, will not support the patentability of subject matter encompassed by the prior art, unless there is evidence indicating that such concentration data are critical. "[W]here the general conditions of a claim are disclosed in prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). Since workable ranges of ingredients are taught by Barton et al., the instant ranges claimed would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made. No unexpected results have been demonstrated with combination of quantities required by the instant invention.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHANON A. FOLEY whose telephone number is (571)272-0898. The examiner can normally be reached on flex, generally M-F 7AM - 3 PM, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne L. Eyler can be reached on (571) 272-0871. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Shanon A. Foley/  
Primary Examiner  
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